

Bovine TB News

MICHIGAN STATE
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EXTENSION

December 5, 2008 (delayed to bring you the latest news from the USDA Listening Session)

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Michigan Update:

New case of bovine tuberculosis (bTB)

A beef cow from a 40 cow Alpena herd (within the MA Zone) was confirmed on December 1 by PCR as positive for bTB. The animal was found through routine herd testing. This is the 45th positive cattle herd in Michigan and the first herd diagnosed in fiscal year (FY) 2009 (Oct. 1, 2008 – Sep. 30, 2009), while three were diagnosed in FY 2008. The farm operation will be reviewed by “Team Epi”, an epidemiological investigation group to learn about the probable means of infection.

MDA issues working draft Strategic Plan

The Michigan Department of Agriculture has published a Bovine Tuberculosis Eradication Program draft (version 12-5-08) Strategic Plan for the period 2009-2029. The plan timeline reflects the “projected 10-20 years that experts predict will be needed before bovine TB drops to undetectable levels in Michigan wildlife.” It is divided into three time periods: Short Term 2009, Mid-Term 2010-2015 and Long-Term 2015-2029.

The short term plan includes restructuring the Memorandum of Understanding (MOU) with USDA to identify steps needed to transition to a more risk-based program such as the process for reducing the MAZ to the 5 county area, targeted surveillance testing based on risk and developing a sustainable animal ID and traceability network. Additional statements in the short term plan concern engaging local stakeholders in public deliberation about Michigan’s bTB project and using stakeholder input to help develop a plan with measureable objectives and timelines based on regulatory requirements. In addition, the plan is to reach agreement on and obtain funding for a “National Bovine Tuberculosis Elimination from Wildlife Reservoirs” pilot project.

The complete draft strategic plan is available on-line at www.michigan.gov/emergingdiseases. In the conclusion, the draft states that “Michigan has entered a critical phase in the disease eradication program and producer and industry support, ownership and participation will be paramount to its success.”

Initial report from USDA’s program review

USDA conducted a bTB program review and has given its verbal report. The tone of this report was much more positive than the last one and reviewers commended MDA and the Michigan office of USDA APHIS for a number of areas including implementing effective program management and progress in wildlife risk mitigation, herd inventory compliance, investigation of bTB positive herds and livestock market coverage. The areas for improvement that they identified included increasing incentives for more personal responsibility and seeking solutions to the current technology limitations hampering animal traceability efforts. The written report is expected in March, 2009.

The next collaborative step with USDA will be to update the MOU between MDA, Michigan Department of Natural Resources and USDA over the next several months.

USDA TB Listening Session

The first bTB Listening Session was held in Lansing, MI on December 8. Subsequent sessions will be held this week in Minneapolis, Austin, TX and Sacramento and in Washington, DC on Tuesday, December 16. Through these sessions and additional input, USDA intends to “make major changes in the national bTB program with the objectives of making it responsive, timely, cost-effective and protective of animal and human health.” The agenda essentially consisted of a presentation by Dr. John Clifford, an opportunity for public comments and breakout sessions that lasted for two hours.

Dr. Clifford outlined eight challenges that demand a new approach. Those challenges were: Importation of infected cattle, Wildlife as a reservoir, Cattle industry changes, Limitations of tests, Traceback deficiencies, Outdated regulations, Antiquated disease control approach and Fiscal realities.

The breakout sessions were facilitated by a USDA official and another recorded comments made. The discussion questions were:

- What (2-3) priority actions/changes/modifications should be made given the current situation?
- How would you achieve the actions/changes/modifications identified?
- How would you address a) biosecurity, b) wildlife, and c) (Mexican) imports?
- What should be the roles and responsibilities of each partner (federal, state, industry and producers)?
- What should be the goal of a national TB program? Should it be an eradication or control program?

Anyone may submit comments to USDA via e-mail using the address: TB.Comments@aphis.usda.gov. The plan is to assimilate the information from each of the five listening sessions and develop new rules. Summaries from each site will be placed on-line in several weeks. To find them, go to www.aphis.usda.gov, click on Hot Issues (you may need to select “more”), and select Bovine Tuberculosis.

National & International Update:

Indiana and North Dakota

In both states, investigations are underway following the unrelated finding of infected beef animals at slaughter plants. A beef animal from southeast Indiana has been

diagnosed with bTB after slaughter surveillance finding at a Pennsylvania slaughter plant. The southwestern North Dakota animal was identified in a Minnesota slaughter plant. The TB-free status of neither state is threatened since up to two affected herds are allowed.

Minnesota

In one of the herds that entered the buyout, three infected cattle have been identified at slaughter. This finding will not affect the status of either zone in Minnesota.

Research

Surveillance of Coyotes to Detect Bovine Tuberculosis, Michigan

VerCauteren KC, Atwood TC, DeLiberto TJ, Et. al. Emerg Infect Dis. 2008 Dec;14(12):1862-9. <http://www.cdc.gov/eid/content/14/12/1862.htm>

175 coyotes in the Michigan bovine TB-endemic area were sampled for bTB from 2003 – 2005. Fifty-eight tested positive (33%), and infection prevalence by county ranged from 19% to 52%. Since coyotes are predators, they appear to be a “bioaccumulator” of bTB, presumably from eating other bTB infected animals. Because of this, they could serve as a sensitive sentinel for regional detection and monitoring of bTB in wildlife.

Estimating the true prevalence of *Mycobacterium bovis* in free-ranging elk in Michigan.

O'Brien DJ, Schmitt SM, Berry DE, et al. J Wildl Dis. 2008 Oct;44(4):802-10.

Elk are known to be susceptible to bTB. The Michigan elk herd range lies entirely within counties where TB is known to be enzootic in white-tailed deer. The aim of this study was to estimate the prevalence of bTB in Michigan's Elk herd. 334 elk were included in this study from 2002-2004. Twenty-three elk with gross lesions were considered TB suspects; all were culture-negative for *M. bovis*. However, *M. bovis* was cultured from two elk without gross lesions. The estimated prevalence of bTB was calculated at 0.6%.

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This newsletter is meant to keep you updated about bTB in Michigan and elsewhere and to answer questions you may have. If you have a question, please send it by return e-mail. Address questions or comments to Phil Durst at 989-826-1160 or durstp@msu.edu.

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